

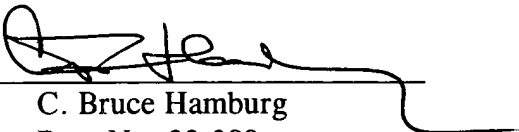
**REMARKS**

In order that a single paragraph abstract on a separate sheet be provided, the subject matter in addition to the initial single paragraph has been deleted by this amendment. That subject matter merely reiterated information contained in the body of this specification.

Respectfully submitted,

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**APPENDIX I****AMENDED ABSTRACT WITH AMENDMENTS INDICATED THEREIN  
BY BRACKETS AND UNDERLINING****ABSTRACT OF THE DISCLOSURE**

A Pulsed Electron Beam System is developed and applied for the surface modification of the metal and/or partial metal dentures. The system is consisted with an explosive emission cathode, accelerating gap formed by the cathode and plasma anode, and an electron collector where the metal and/or partial metal dentures are fixed, and placed into a magnetic field. The method can provide a modified metal and/or partial metal denture surface with high reflectance as a mirror polished surface and high corrosion resistance.

[In the formula (1), each symbol and the values mean as:

$r$  : penetration depth of the electrons in material

$a$  : thermal diffusivity

$k$  : coefficient which depends on the material properties

$\lambda$  : thermal conductivity

$\rho$  : density

$c$  : heat capacity]

Fig. 1. : 1. Vacuum chamber

2. Scroll pump

3. Turbo molecular pump

4. Flow control valve

5. Solenoids

6. Anode

7. Anode plasma

8. Cathode

9. Cathode plasma

10. Electric double layer

11. Electron Beam

12. Irradiated denture ]

[ 13. Rotating sample holder

Fig. 2.: 14. Solenoid current

15. Anode current

16. Cathode voltage ]